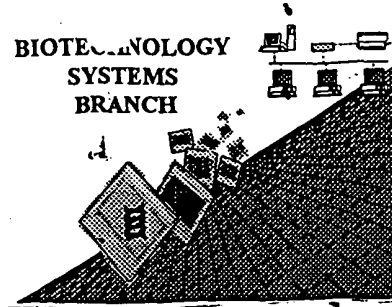


590  
12/0

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



**RAW SEQUENCE LISTING**  
**ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 091998, 551

Source: OIPÉ

Date Processed by STIC: 12/10/01

**THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.**

**PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:**

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

**FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.**

**FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.**

**PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**PATENTIN 3.0 e-mail help: [patin3help@uspto.gov](mailto:patin3help@uspto.gov) or phone 703-306-4119 (R. Wax)**

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:**

**Checker Version 3.0**

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

**Checker Version 3.0 can be down loaded from the USPTO website at the following address:**

**<http://www.uspto.gov/web/offices/pac/checker>**

# Raw Sequence Listing Error Summary

## ERROR DETECTED

## SUGGESTED CORRECTION

SERIAL NUMBER: 09/998,551

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1      Wrapped Nucleics  
    Wrapped Aminos    The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2      Invalid Line Length    The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3      Misaligned Amino  
    Numbering    The numbering under each 5<sup>th</sup> amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4      Non-ASCII    The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5      Variable Length    Sequence(s)      contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6      PatentIn 2.0  
    "bug"    A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s)     . Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7      Skipped Sequences  
    (OLD RULES)    Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence:  
                    (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                    (i)     SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)  
                    (xi)  SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)  
                    This sequence is intentionally skipped  
  
                    Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8      Skipped Sequences  
    (NEW RULES)    Sequence(s)      missing. If intentional, please insert the following lines for each skipped sequence.  
                    <210> sequence id number  
                    <400> sequence id number  
                    000
- 9      Use of n's or Xaa's  
    (NEW RULES)    Use of n's and/or Xaa's have been detected in the Sequence Listing.  
                    Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.  
                    In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 ✓ Invalid <213>  
    Response    Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11      Use of <220>    Sequence(s)      missing the <220> "Feature" and associated numeric identifiers and responses.  
                    Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.  
                    (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12      PatentIn 2.0  
    "bug"    Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

OIPE

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/998,551

DATE: 12/10/2001

TIME: 16:34:40

Input Set : A:\09820155.ST25.txt

Output Set: N:\CRF3\12102001\I998551.raw

**Does Not Comply**  
**Corrected Diskette Needed**

*Some errors on pp 1-3*

3 <110> APPLICANT: Nelson, Bryce P  
 4 Liles, Mark R  
 5 Frederick, Kendra  
 6 Corn, Robert M  
 7 Robert, Goodman M  
 9 <120> TITLE OF INVENTION: Label-Free Detection of Nucleic Acids Via Surface Plasmon Resonance  
 11 <130> FILE REFERENCE: 09820.155  
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/998,551  
 C--> 14 <141> CURRENT FILING DATE: 2001-11-29  
 16 <150> PRIOR APPLICATION NUMBER: 09/456,038  
 17 <151> PRIOR FILING DATE: 1999-12-03  
 19 <150> PRIOR APPLICATION NUMBER: 09/368,991  
 20 <151> PRIOR FILING DATE: 1999-08-05  
 22 <150> PRIOR APPLICATION NUMBER: 60/132,342  
 23 <151> PRIOR FILING DATE: 1999-05-04  
 25 <160> NUMBER OF SEQ ID NOS: 14  
 27 <170> SOFTWARE: PatentIn version 3.1  
 29 <210> SEQ ID NO: 1  
 30 <211> LENGTH: 20  
 31 <212> TYPE: DNA  
 32 <213> ORGANISM: Synthetic oligonucleotide - invalid response, see error summary sheet item 10  
 34 <220> FEATURE:  
 35 <221> NAME/KEY: misc\_feature  
 36 <222> LOCATION: (12)..(12)  
 37 <223> OTHER INFORMATION: n is A or C  
 40 <400> SEQUENCE: 1  
 W--> 41 agagtttgat cntggctcag 20  
 44 <210> SEQ ID NO: 2  
 45 <211> LENGTH: 19  
 46 <212> TYPE: DNA  
 47 <213> ORGANISM: Synthetic oligonucleotide  
 49 <220> FEATURE:  
 50 <221> NAME/KEY: misc\_feature  
 51 <222> LOCATION: (3)..(3)  
 52 <223> OTHER INFORMATION: n is G or T  
 55 <220> FEATURE:  
 56 <221> NAME/KEY: misc\_feature  
 57 <222> LOCATION: (3)..(3)  
 58 <223> OTHER INFORMATION: n is C or T  
 61 <400> SEQUENCE: 2  
 W--> 62 ggntaccttg ttacgactt 19  
 65 <210> SEQ ID NO: 3  
 66 <211> LENGTH: 20  
 67 <212> TYPE: DNA  
 68 <213> ORGANISM: Synthetic oligonucleotide  
 70 <400> SEQUENCE: 3  
 71 gtccccctct ttggtcttgc 20

## RAW SEQUENCE LISTING

DATE: 12/10/2001

PATENT APPLICATION: US/09/998,551

TIME: 16:34:40

Input Set : A:\09820155.ST25.txt

Output Set: N:\CRF3\12102001\I998551.raw

74 <210> SEQ ID NO: 4	
75 <211> LENGTH: 16	
76 <212> TYPE: DNA	
77 <213> ORGANISM: Synthetic oligonucleotide	
79 <400> SEQUENCE: 4	
80 ctccccgctg aaagta	16
83 <210> SEQ ID NO: 5	
84 <211> LENGTH: 15	
85 <212> TYPE: DNA	
86 <213> ORGANISM: Synthetic oligonucleotide	
88 <400> SEQUENCE: 5	
89 cgggtgcttct tctgc	15
92 <210> SEQ ID NO: 6	
93 <211> LENGTH: 21	
94 <212> TYPE: DNA	
95 <213> ORGANISM: Synthetic oligonucleotide	
97 <400> SEQUENCE: 6	
98 cttttatggtt tgaaccatgc g	21
101 <210> SEQ ID NO: 7	
102 <211> LENGTH: 16	
103 <212> TYPE: DNA	
104 <213> ORGANISM: Synthetic oligonucleotide	
106 <400> SEQUENCE: 7	
107 ttccctaaca acagag	16
110 <210> SEQ ID NO: 8	
111 <211> LENGTH: 16	
112 <212> TYPE: DNA	
113 <213> ORGANISM: Synthetic oligonucleotide	
115 <400> SEQUENCE: 8	
116 cgtggctttc tggta	16
119 <210> SEQ ID NO: 9	
120 <211> LENGTH: 17	
121 <212> TYPE: DNA	
122 <213> ORGANISM: Synthetic oligonucleotide	
124 <400> SEQUENCE: 9	
125 actgctgcct cccgtag	17
128 <210> SEQ ID NO: 10	
129 <211> LENGTH: 24	
130 <212> TYPE: DNA	
131 <213> ORGANISM: Synthetic oligonucleotide	
133 <400> SEQUENCE: 10	
134 ggatgtgtgt ggagtgttag aaag	24
137 <210> SEQ ID NO: 11	
138 <211> LENGTH: 18	
139 <212> TYPE: DNA	
140 <213> ORGANISM: Synthetic oligonucleotide	
142 <400> SEQUENCE: 11	
143 gccgaagcca cttttat	18
146 <210> SEQ ID NO: 12	

## RAW SEQUENCE LISTING

DATE: 12/10/2001

PATENT APPLICATION: US/09/998,551

TIME: 16:34:40

Input Set : A:\09820155.ST25.txt

Output Set: N:\CRF3\12102001\I998551.raw

147 <211> LENGTH: 18  
148 <212> TYPE: DNA  
149 <213> ORGANISM: Synthetic oligonucleotide  
151 <400> SEQUENCE: 12  
152 ataaaaggtg gcttcggc 18  
155 <210> SEQ ID NO: 13  
156 <211> LENGTH: 18  
157 <212> TYPE: DNA  
158 <213> ORGANISM: Synthetic oligonucleotide  
160 <400> SEQUENCE: 13  
161 gccagcttat tcaactag 18  
164 <210> SEQ ID NO: 14  
165 <211> LENGTH: 18  
166 <212> TYPE: DNA  
167 <213> ORGANISM: Synthetic oligonucleotide  
169 <400> SEQUENCE: 14  
170 ctagttgaat aagctggc 18

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/998,551

DATE: 12/10/2001

TIME: 16:34:41

Input Set : A:\09820155.ST25.txt

Output Set: N:\CRF3\12102001\I998551.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number  
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date  
L:41 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1  
L:62 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2